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TRANSMITTAL LETTER (General - Patent Pending)	Docket No. 1641.00005

In Re Application Of: **Bror H. Hanson**

Application No.	Filing Date	Examiner	Customer No.	Group Art Unit	Confirmation No.
09/954,899	September 18, 2001	September 18, 2001	010534	1762	8597

Title: **MOLD-RELEASE COATING SYSTEMS**

COMMISSIONER FOR PATENTS:

Transmitted herewith is:

Amended Appeal Brief (in triplicate).

in the above identified application.

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Dated: March 3, 2005

Signature

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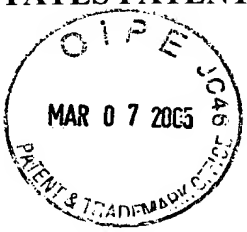

Art Unit:	1762
Examiner:	K. Jolley
Applicant(s):	Bror H. Hanson
Serial No.:	09/954,899
Filing Date:	September 18, 2001
For:	MOLD-RELEASE COATING SYSTEMS

AMENDED APPEAL BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Sir:

This Amended Appeal Brief is in response to the Notification of Non-Compliant Appeal Brief under 37 C.F.R. 41.37 dated February 3, 2005. Although Applicants disagree with the Notification, this Amended Appeal Brief is being submitted in accordance with the Notice of Appeal filed on August 6, 2004. Applicants have appealed the Final Rejection dated April 8, 2004 and submit this Amended Appeal Brief in support of that appeal.

REAL PARTY IN INTEREST

The real party in interest is the Assignee, Polymerit Corporation.

RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences regarding the present application.

CERTIFICATE OF MAILING: (37 C.F.R. 1.8) I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the U.S. Postal Service with sufficient postage as First Class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on March 3, 2005, by

Daniel H. Bliss

STATUS OF CLAIMS

Claims 1 through 10 have been canceled.

Claims 11 and 12 have been rejected.

Claims 13 and 14 have been allowed.

Claims 15 and 16 have been rejected.

Claims 11, 12, 15, and 16 are being appealed.

STATUS OF AMENDMENTS

An Amendment Under 37 C.F.R. 1.116 was filed on August 6, 2004 in response to the Final Office Action dated April 8, 2004. An Advisory Action dated August 23, 2004 indicated that the Amendment under 37 C.F.R. 1.116 had been considered, but would not place the application in a condition for allowance. The Advisory Action indicated that, upon the filing of an appeal, the Amendment under 37 C.F.R. 1.116 would be entered. A Notice of Appeal and Petition for One Month Extension of Time, along with the requisite fees, were filed on August 6, 2004. The Appeal Brief and Petition for One Month Extension of Time, along with the requisite fees, are submitted herewith.

SUMMARY OF CLAIMED SUBJECT MATTER

The claimed subject matter is directed to a method for forming a mold-release coating system on a mold surface that includes the steps of providing a barrier coating of a substantially liquid wax material, wherein the wax material includes about 7 to about 10 weight percent solids. [The barrier coat is preferably comprised of a wax-based material. It is intended that the barrier coat be applied to, or deposited on, the surface of the mold. Preferably, the wax-

based material is in a substantially liquid phase. However, in accordance with a preferred embodiment of the present invention, the substantially liquid wax material contains from about 7 to about 10 weight percent solids.] (Specification, page 4, line 25 through page 5, line 7).

The method also includes the steps of applying the wax material onto a mold surface and permitting the wax material to substantially dry after application onto the mold surface. [With respect to the application of the wax-based material to the mold surface, it is preferred to apply a coat of the substantially liquid high-solids wax thereon. Preferably, a stream of the substantially liquid high-solids wax is directed at the mold surface. The coat of wax is then preferably allowed to dry (e.g., using dry compressed air) in order to remove solvents from the wax coat. This spray application step is preferably repeated a second time with the second wax coat being permitted to dry (e.g., air drying).] (Specification, page 5, lines 15 through 24).

The method further includes the steps of providing a release powder and applying the release powder onto the barrier coating after the wax material has been permitted to substantially dry after application onto the mold surface. [The release powder is preferably electrostatically sprayed onto, or otherwise applied to, the barrier coat before pouring the foam precursor material into the mold for each foam part to be formed. The amount of release powder is preferably in the amount of about 0.3 to about 1.0 grams per part or charge of foam precursor material.] (Specification, page 5, line 26 through page 6, line 4).

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1) The first ground of rejection to be reviewed on appeal is whether the claimed invention of claims 11, 12, 15, and 16 are obvious and unpatentable under the judicially

created doctrine of obviousness-type double patenting over claims 1 through 4, 6, and 8 of U.S. Patent No. 6,291,026 in view of Urena (U.S. Patent No. 5,294,251).

2) The second ground of rejection to be reviewed on appeal is whether the claimed invention of claims 11, 12, 15, and 16 are obvious and unpatentable under the judicially created doctrine of obviousness-type double patenting over claims 1 through 4, 6, 8, and 9 of U.S. Patent No. 6,117,495 in view of Urena (U.S. Patent No. 5,294,251).

3) The third ground of rejection to be reviewed on appeal is whether the claimed invention of claims 11, 12, 15, and 16 are obvious and unpatentable under 35 U.S.C. § 103 over Hanson et al. (U.S. Patent No. 6,117,495) in view of Urena (U.S. Patent No. 5,294,251).

ARGUMENT

1) No Obviousness-Type Double Patenting of Claims over Claims 1 through 4, 6, and 8 of U.S. Patent No. 6,291,026 in view of U.S. Patent No. 5,294,251

The double-patenting doctrine precludes one person from obtaining more than one valid patent for the same invention or an obvious modification of an invention. Double patenting is concerned with attempts to claim the same or related subject matter twice. Thus, the standard for comparison for the second patent is what was *claimed* in the first patent, not what was *disclosed* in the specification of the first patent. "In general, a rejection on grounds of double patenting relies upon an analysis similar to the obviousness analysis relevant to a rejection pursuant to §§ 102(e) and 103; the key difference is that a double-patenting rejection looks solely to the claims of the prior art reference, and not to the entire disclosure of the prior art reference, as the basis for comparison. . . . A rejection for obviousness must be based on a comparison of the invention to the entirety of the disclosure in the prior art reference, whereas an obviousness-

type double-patenting rejection must be grounded on a comparison of the invention to the claims, and only the claims, of the prior art reference." Purdue Pharma L.P. v. Boehringer Ingelheim GmbH, 98 F.Supp.2d 362, 392, 55 U.S.P.Q.2d 1168, 1190 (S.D. N.Y. 2000), *aff'd*, 237 F.3d 1359, 57 U.S.P.Q.2d 1647 (Fed. Cir. 2001).

U.S. Patent No. 6,291,026 claims a method for forming a mold-release coating on a mold surface. Claim 1, which is representative of claims 1 through 4, 6, and 8, claims the method as including the steps of providing a coating of material on a mold surface, the coating of material having a surface which is capable of accepting and retaining a release powder. Claim 1 also claims the steps of depositing the release powder onto the coating of material, the release powder embedding the coating of material upon deposition thereby forming a mold-release coating.

U.S. Patent No. 5,294,251 claims a process of producing a coating composition. Claim 7, which is representative of claims 1 through 18, claims the process as including the steps of heating microcrystalline paraffin wax with a solvent substantially at room temperature and dispersing the microcrystalline wax. Claim 7 also claims the steps of the solvent consisting essentially of a mixture of an aliphatic solvent and at least one aromatic solvent to form the composition.

Claims 11, 12, 15, and 16

Claim 11 claims a method for forming a mold-release coating system on a mold surface. Claim 11, which is representative of claims 11, 12, 15, and 16, claims the method as including the steps of providing a barrier coating of a substantially liquid wax material, wherein the wax material includes about 7 to about 10 weight percent solids. The method also includes the steps of applying the wax material onto a mold surface and permitting the wax material to substantially dry after application onto the mold surface. The method further includes the steps of

providing a release powder and applying the release powder onto the barrier coating after the wax material has been permitted to substantially dry after application onto the mold surface.

None of the claims of the references cited, either alone or in combination with each other, render obvious the claimed invention of claims 11, 12, 15, and 16 under the judicially created doctrine of obviousness-type double patenting. Claim 1 of the '026 patent is claiming a method for forming a mold-release coating on a mold surface including the steps of providing a coating of material on the mold surface, the coating of material having a surface which is capable of accepting and retaining a release powder, and depositing the release powder onto the coating of material, the release powder embedding the coating of material upon deposition thereby forming a mold-release coating. However, none of the claims of this patent claims the steps of providing a barrier coating of a substantially liquid wax material, wherein the wax material includes about 7 to about 10 weight percent solids, permitting wax material to substantially dry after application onto the mold surface, and applying the release powder onto the barrier coating after the wax material has been permitted to substantially dry after application onto the mold surface.

Claim 7 of the '251 patent is claiming a process of producing a coating composition including the steps of heating microcrystalline paraffin wax with a solvent substantially at room temperature and dispersing the microcrystalline wax, the solvent consisting essentially of a mixture of an aliphatic solvent and at least one aromatic solvent to form the composition. The claims of the this patent do not claim a method for forming a mold-release coating system on a mold surface including the steps of providing a barrier coating of a substantially liquid wax material, wherein the wax material includes about 7 to about 10 weight percent solids, applying the wax material onto the mold surface, permitting wax material to substantially dry after application onto the mold surface, providing a release powder, and

applying the release powder onto the barrier coating after the wax material has been permitted to substantially dry after application onto the mold surface as claimed by Applicant in claim 11 of the present application in addition to the other features found in claims 12, 15, and 16.

The claims of the present application are for a distinct and separate unobvious invention. None of the claims of the '026 or '251 patents claim a wax material that includes about 7 to about 10 weight percent solids, permitting wax material to substantially dry after application onto the mold surface, and applying the release powder onto the barrier coating after the wax material has been permitted to substantially dry after application onto the mold surface. These limitations do not read on the steps of providing a coating of material on a mold surface, the coat of material having a surface which is capable of accepting and retaining a release powder, and the release powder becoming at least partially embedded into the coat of material upon deposition, thereby forming a mold-release coating. Contrary to the Examiner's opinion, MPEP 804 states that "[w]hen considering whether the invention defined in a claim of an application is an obvious variation of the invention defined in the claim of a patent, the disclosure of the patent may not be used as the prior art". The Examiner has failed to correct apply an obviousness-type double-patenting rejection by comparing the invention to the claims, and only the claims, of the prior art references. As a result, there is no double patenting involved and no terminal disclaimer need be filed.

Against this background, it is submitted that the present invention is not subject to obviousness-type double patenting in view of claims 1 through 4, 6, 8, and 9 of U.S. Patent No. 6,117,495 in view of Urena (U.S. Patent No. 5,294,251). The references fail to teach or suggest the claimed combination of a method for forming a mold-release coating system on a mold surface of claims 11, 12, 15, and 16. Therefore, it is respectfully submitted that claims 11, 12,

15, and 16 are not subject to obviousness-type double patenting and are allowable over the rejection under the judicially created doctrine of obviousness-type double patenting.

2) No Obviousness-Type Double Patenting of Claims over Claims 1 through 4, 6, 8, and 9 of U.S. Patent No. 6,117,495 in view of U.S. Patent No. 5,294,251

The double-patenting doctrine precludes one person from obtaining more than one valid patent for the same invention or an obvious modification of an invention. Double patenting is concerned with attempts to claim the same or related subject matter twice. Thus, the standard for comparison for the second patent is what was *claimed* in the first patent, not what was *disclosed* in the specification of the first patent. "In general, a rejection on grounds of double patenting relies upon an analysis similar to the obviousness analysis relevant to a rejection pursuant to §§ 102(e) and 103; the key difference is that a double-patenting rejection looks solely to the claims of the prior art reference, and not to the entire disclosure of the prior art reference, as the basis for comparison. . . . A rejection for obviousness must be based on a comparison of the invention to the entirety of the disclosure in the prior art reference, whereas an obviousness-type double-patenting rejection must be grounded on a comparison of the invention to the claims, and only the claims, of the prior art reference." Purdue Pharma L.P. v. Boehringer Ingelheim GmbH, 98 F.Supp.2d 362, 392, 55 U.S.P.Q.2d 1168, 1190 (S.D. N.Y. 2000), *aff'd*, 237 F.3d 1359, 57 U.S.P.Q.2d 1647 (Fed. Cir. 2001).

U.S. Patent No. 6,117,495 claims a method for forming a mold-release coating on a mold surface. Claim 1, which is representative of claims 1 through 4, 6, 8, and 9, claims the method as including the steps of providing a base coat of material on the mold surface, the base coat of material having a surface which is capable of accepting and retaining a release powder.

Claim 1 also claims the steps of electrostatically depositing a release powder onto the base coat of material, the release powder becoming at least partially embedded into the base coat of material upon deposition, thereby forming a mold-release coating.

U.S. Patent No. 5,294,251 claims a process of producing a coating composition. Claim 7, which is representative of claims 1 through 18, claims the process as including the steps of heating microcrystalline paraffin wax with a solvent substantially at room temperature and dispersing the microcrystalline wax. Claim 7 also claims the steps of the solvent consisting essentially of a mixture of an aliphatic solvent and at least one aromatic solvent to form the composition.

Claims 11, 12, 15, and 16

Claim 11 claims a method for forming a mold-release coating system on a mold surface. Claim 11, which is representative of claims 11, 12, 15, and 16, claims the method as including the steps of providing a barrier coating of a substantially liquid wax material, wherein the wax material includes about 7 to about 10 weight percent solids. The method also includes the steps of applying the wax material onto the mold surface and permitting wax material to substantially dry after application onto the mold surface. The method further includes the steps of providing a release powder and applying the release powder onto the barrier coating after the wax material has been permitted to substantially dry after application onto the mold surface.

None of the claims of the references cited, either alone or in combination with each other, render obvious the claimed invention of claims 11, 12, 15, and 16 under the judicially created doctrine of obviousness-type double patenting. Claim 1 of the '495 patent is claiming a mold-release coating on a mold surface including the steps of providing a base coat of material on the mold surface, the base coat of material having a surface which is capable of accepting and

retaining a release powder, and electrostatically depositing a release powder onto the base coat of material, the release powder becoming at least partially embedded into the base coat of material upon deposition, thereby forming a mold-release coating. However, none of the claims of this patent claims the steps of providing a barrier coating of a substantially liquid wax material, wherein the wax material includes about 7 to about 10 weight percent solids, permitting wax material to substantially dry after application onto the mold surface, and applying the release powder onto the barrier coating after the wax material has been permitted to substantially dry after application onto the mold surface.

Claim 7 of the '251 patent is claiming a process of producing a coating composition including the steps of heating microcrystalline paraffin wax with a solvent substantially at room temperature and dispersing the microcrystalline wax, the solvent consisting essentially of a mixture of an aliphatic solvent and at least one aromatic solvent to form the composition. The claims of the this patent do not claim a method for forming a mold-release coating system on a mold surface including the steps of providing a barrier coating of a substantially liquid wax material, wherein the wax material includes about 7 to about 10 weight percent solids, applying the wax material onto the mold surface, permitting wax material to substantially dry after application onto the mold surface, providing a release powder, and applying the release powder onto the barrier coating after the wax material has been permitted to substantially dry after application onto the mold surface as claimed by Applicant in claim 11 of the present application in addition to the other features found in claims 12, 15, and 16.

The claims of the present application are for a distinct and separate unobvious invention. None of the claims of the '495 or '251 patents claim a wax material that includes about 7 to about 10 weight percent solids, permitting wax material to substantially dry after

application onto the mold surface, and applying the release powder onto the barrier coating after the wax material has been permitted to substantially dry after application onto the mold surface. These limitations do not read on the steps of providing a base coat of material on the mold surface, the base coat of material having a surface which is capable of accepting and retaining a release powder, and electrostatically depositing a release power on the base coat of material, the release powder becoming at least partially embedded into the base coat of material upon deposition, thereby forming a mold-release coating. Contrary to the Examiner's opinion, MPEP 804 states that "[w]hen considering whether the invention defined in a claim of an application is an obvious variation of the invention defined in the claim of a patent, the disclosure of the patent may not be used as the prior art". The Examiner has failed to correct apply an obviousness-type double-patenting rejection by comparing the invention to the claims, and only the claims, of the prior art references. As a result, there is no double patenting involved and no terminal disclaimer need be filed.

Against this background, it is submitted that the present invention is not subject to obviousness-type double patenting in view of claims 1 through 4, 6, 8, and 9 of U.S. Patent No. 6,117,495 in view of Urena (U.S. Patent No. 5,294,251). The references fail to teach or suggest the claimed combination of a method for forming a mold-release coating system on a mold surface of claims 11, 12, 15, and 16. Therefore, it is respectfully submitted that claims 11, 12, 15, and 16 are not subject to obviousness-type double patenting and are allowable over the rejection under the judicially created doctrine of obviousness-type double patenting.

3) Claims Not Obvious or Unpatentable Under 35 U.S.C. § 103

As to patentability, 35 U.S.C. § 103 provides that a patent may not be obtained:

> If the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Id.

The United States Supreme Court interpreted the standard for 35 U.S.C. § 103 in Graham v. John Deere, 383 U.S. 1, 148 U.S.P.Q. 459 (1966). In Graham, the Court stated that under 35 U.S.C. § 103:

> The scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or non-obviousness of the subject matter is determined. 148 U.S.P.Q. at 467.

Using the standard set forth in Graham, the scope and content of the prior art relied upon by the Examiner will be determined.

U.S. Patent No. 6,117,495 to Hanson et al. discloses a method for forming a mold-release coating. One embodiment of providing the base coat of material on the mold surface includes providing a base coat of solvent base wax to the mold which substantially remains on the mold during subsequent molding operations. The base coat is generally a 0.1 to 3 mm, preferably 0.1 to 1 mm, built-up layer of solvent base wax that is always present when molding large quantities of production parts with spray wax. Periodically, such as once every ten parts, a normal application of solvent base wax is sprayed on the mold. Just before pouring each part, the release powder is electrostatically deposited on the base coat in the mold, generally 0.5 to 2 g.

U.S. Patent No. 5,294,251 to Urena discloses a microcrystalline wax coating composition. Microcrystalline paraffin waxes have been found to be particularly suitable for the coating compositions. Microcrystalline paraffin wax when dispersed in the solvent produces a film after evaporation of the solvent that is flexible and adheres well to the treated surface. The microcrystalline wax is included in the solvent system in the amount of about 1% to 30% by weight. For most applications, the microcrystalline wax is included in the amount of about 5% to 15% by weight. The coating composition can be applied to the surface of an article to be treated by brushing, spraying, dipping or flooding. It has also been found to produce an effective release coating for molds used in molding plastics, rubber, polystyrene foam concrete and molten metals, such as bronze and aluminum.

Claims 11, 12, 15, and 16

Claim 11 claims the present invention as a method for forming a mold-release coating system on a mold surface including the steps of providing a barrier coating of a substantially liquid wax material, wherein the wax material includes about 7 to about 10 weight percent solids. The method also includes the steps of applying the wax material onto the mold surface and permitting wax material to substantially dry after application onto the mold surface. The method further includes the steps of providing a release powder and applying the release powder onto the barrier coating after the wax material has been permitted to substantially dry after application onto the mold surface.

The United States Court of Appeals for the Federal Circuit (CAFC) has stated in determining the propriety of a rejection under 35 U.S.C. § 103(a), it is well settled that the obviousness of an invention cannot be established by combining the teachings of the prior art

absent some teaching, suggestion or incentive supporting the combination. See In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 227 U.S.P.Q. 657 (Fed. Cir. 1985); ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 221 U.S.P.Q. 929 (Fed. Cir. 1984). The law followed by our court of review and the Board of Patent Appeals and Interferences is that " [a] prima facie case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art." In re Rinehart, 531 F.2d 1048, 1051, 189 U.S.P.Q. 143, 147 (C.C.P.A. 1976). See also In re Lalu, 747 F.2d 703, 705, 223 U.S.P.Q. 1257, 1258 (Fed. Cir. 1984) ("In determining whether a case of prima facie obviousness exists, it is necessary to ascertain whether the prior art teachings would appear to be sufficient to one of ordinary skill in the art to suggest making the claimed substitution or other modification.")

As to the differences between the prior art and the claims at issue, the primary reference to Hanson et al. '495 merely discloses a method for forming a mold-release coating having a base coat of solvent base wax to the mold generally a 0.1 to 3 mm, and just before pouring each part, a release powder is electrostatically deposited on the base coat in the mold, generally 0.5 to 2 g. Hanson et al. '495 lacks providing a barrier coating of a substantially liquid wax material, wherein the wax material includes about 7 to about 10 weight percent solids, permitting wax material to substantially dry after application onto a mold surface, and applying the release powder onto the barrier coating after the wax material has been permitted to substantially dry after application onto the mold surface. In Hanson et al. '495, there is no 7 to about 10 weight percent solids in a substantially liquid wax material.

The secondary reference to Urena '251 merely discloses a microcrystalline wax coating composition in which microcrystalline paraffin wax when dispersed in solvent produces a film after evaporation of the solvent that is flexible and adheres well to the treated surface and the microcrystalline wax is included in the solvent system in the amount of about 1% to 30% by weight. Urena '251 lacks providing a barrier coating of a substantially liquid wax material, wherein the wax material includes about 7 to about 10 weight percent solids, permitting wax material to substantially dry after application onto a mold surface, and applying the release powder onto the barrier coating after the wax material has been permitted to substantially dry after application onto the mold surface. In Urena '251, the composition coating contains 10 to 15 parts by weight microcrystalline wax and not 7 to about 10 weight percent solids in a substantially liquid wax material.

As to the level of ordinary skill in the pertinent art, Hanson et al. '495 merely discloses a method for forming a mold-release coating having a base coat of solvent base wax to the mold generally a 0.1 to 3 mm. Urena '251 merely discloses a microcrystalline wax coating composition in which microcrystalline paraffin wax when dispersed in solvent. However, there is absolutely no teaching of a level of skill in the mold release art of providing a barrier coating of a substantially liquid wax material, wherein the wax material includes about 7 to about 10 weight percent solids, permitting wax material to substantially dry after application onto a mold surface, and applying the release powder onto the barrier coating after the wax material has been permitted to substantially dry after application onto the mold surface. The Examiner may not, because he/she doubts that the invention is patentable, resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in the factual basis. See In re Warner, 379 F. 2d 1011, 154 U.S.P.Q. 173 (C.C.P.A. 1967). While Hanson et al. '495 teaches

providing a base coat of material on the mold surface having a surface which is capable of accepting and retaining a release powder, and depositing a release powder onto the base coat of material to become at least partially embedded upon deposition forming a mold-release coating, Hanson et al. '495 does not teach or suggest a coating of a substantially liquid wax material, wherein the wax material includes about 7 to about 10 weight percent solids, permitting wax material to substantially dry after application onto a mold surface, and applying the release powder onto the barrier coating after the wax material has been permitted to substantially dry after application onto the mold surface. In addition, while Urena '251 teaches microcrystalline paraffin wax dispersed in a solvent, Urena '251 does not teach a coating of a substantially liquid wax material, wherein the wax material includes about 7 to about 10 weight percent solids, permitting wax material to substantially dry after application onto a mold surface, and applying the release powder onto the barrier coating after the wax material has been permitted to substantially dry after application onto the mold surface. Thus, none of the references teaches a level of skill in the art of a coating of a substantially liquid wax material, wherein the wax material includes about 7 to about 10 weight percent solids, permitting wax material to substantially dry after application onto a mold surface, and applying the release powder onto the barrier coating after the wax material has been permitted to substantially dry after application onto the mold surface. As such, there is no suggestion or motivation in the art to combine Hanson et al. '495 and Urena '251 together.

Even if these references could be combined, neither teaches providing a barrier coating of a substantially liquid wax material, wherein the wax material includes about 7 to about 10 weight percent solids, permitting the wax material to substantially dry after application onto a mold surface, and applying the release powder onto the barrier coating after the wax material has

been permitted to substantially dry after application onto the mold surface. Applicant is not attacking the references individually, but is clearly pointing out that each reference is deficient and, if combined (although Applicant maintains that they are not combinable), the combination is deficient. The references, if combinable, fail to teach or suggest the combination of a method for forming a mold-release coating system on a mold surface including the steps of providing a barrier coating of a substantially liquid wax material, wherein the wax material includes about 7 to about 10 weight percent solids, applying the wax material onto the mold surface, permitting wax material to substantially dry after application onto the mold surface, providing a release powder, and applying the release powder onto the barrier coating after the wax material has been permitted to substantially dry after application onto the mold surface as claimed by Applicants.

Further, the CAFC has held that "[t]he mere fact that prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification". In re Gordon, 733 F.2d 900, 902, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984). The Examiner has failed to show how the prior art suggested the desirability of modification to achieve Applicant's invention. Thus, the Examiner has failed to establish a case of prima facie obviousness.

The present invention sets forth a unique and non-obvious combination of a method for forming a mold-release coating system on a mold surface including the steps of providing a barrier coating of a substantially liquid wax material, wherein the wax material includes about 7 to about 10 weight percent solids, permitting wax material to substantially dry after application onto a mold surface, and applying the release powder onto the barrier coating after the wax material has been permitted to substantially dry after application onto the mold surface. Advantageously, the method for forming a mold-release coating system on a mold

surface uses high-solids waxes in combination with a release powder that extends the useful life of the mold-release coating system.

Obviousness under § 103(a) is a legal conclusion based on factual evidence (In re Fine, 837 F.2d 1071, 1073, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988)), and the subjective opinion of the Examiner as to what is or is not obvious, without evidence in support thereof, does not suffice. The Examiner may not, because he/she doubts that the invention is patentable, resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in the factual basis. See In re Warner, 379 F. 2d 1011, 154 U.S.P.Q. 173 (C.C.P.A. 1967). Because the Examiner has not provided a sufficient factual basis that is supportive of his/her position (see In re Warner, 379 F.2d 1011, 1017, 154 U.S.P.Q. 173, 178 (C.C.P.A. 1967), cert. denied, 389 U.S. 1057 (1968)), the rejection of claim 11 is improper.

Against this background, it is submitted that the present invention of claim 11 is not obvious in view of Hanson et al. '495 and Urena '251. The references fail to teach or suggest the combination of a method for forming a mold-release coating system on a mold surface of claim 11. Therefore, it is respectfully submitted that claim 11 is not obvious and is allowable over the rejection under 35 U.S.C. § 103.

The law is clear that a claim in dependent form shall be construed to incorporate by reference all of the limitations of the claim to which it refers. 35 U.S.C. § 112, ¶ 4. Dependent claims 12, 15, and 16 perfect and further limit independent claim 11. Claim 12 claims the barrier coating as comprising at least two layers of the substantially liquid wax material, wherein each layer is permitted to substantially dry after deposition onto the mold surface. Claim 15 claims the step of applying as applying the release powder to the barrier coating in an amount in the range of about 0.3 to 1.0 grams. Claim 16 claims the step of step of

applying as electrostatic spraying the release powder onto the barrier coating. Based on the above, it is respectfully submitted that claims 12, 15, and 16 are not obvious and are allowable over the rejection under 35 U.S.C. § 103.

In conclusion, it is respectfully submitted that the rejections of claims 11, 12, 15, and 16 are improper and should be reversed.

Respectfully submitted,

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CLAIMS APPENDIX

The claims on appeal are as follows:

11. A method for forming a mold-release coating system on a mold surface, comprising:

providing a barrier coating of a substantially liquid wax material, wherein the wax material includes about 7 to about 10 weight percent solids;

applying the wax material onto the mold surface;

permitting wax material to substantially dry after application onto the mold surface;

providing a release powder; and

applying the release powder onto the barrier coating after the wax material has been permitted to substantially dry after application onto the mold surface.

12. A method as set forth in claim 11 wherein the barrier coating comprises at least two layers of the substantially liquid wax material, wherein each layer is permitted to substantially dry after deposition onto the mold surface.

15. A method as set forth in claim 11 wherein said step of applying comprises applying the release powder to the barrier coating in an amount in the range of about 0.3 to 1.0 grams.

16. A method as set forth in claim 11 wherein said step of applying comprises electrostatic spraying the release powder onto the barrier coating.